




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAY 14 1997

OFFICE OF  
SOLID WASTE AND EMERGENCY  
RESPONSE

**MEMORANDUM**

SUBJECT: National Remedy Review Board Recommendations on the Continental Steel Superfund Site

FROM: Bruce K. Means, Chair   
National Remedy Review Board

TO: William E. Muno, Director  
Superfund Division  
EPA Region 5

**Purpose**

The National Remedy Review Board (NRRB) has completed its review of the proposed remedial action for the Continental Steel Superfund site in Kokomo, Indiana. This memorandum documents the NRRB's advisory recommendations.

**Context for NRRB Review**

As you recall, the Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote consistent and cost-effective decisions. The NRRB furthers these goals by providing a cross-regional, management-level, "real time" review of high cost (and thus potentially controversial) proposed response actions. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds \$30 million, or (2) the preferred alternative costs more than \$10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative. The NRRB review evaluates the proposed actions for consistency with the National Contingency Plan and relevant Superfund policy and guidance. It focuses on the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; Regional,

State/tribal, and other stakeholder opinions on the proposed actions (to the extent they are known at the time of review); and any other relevant factors.

Generally, the NRRB makes “advisory recommendations” to the appropriate Regional decision maker before the Region issues the proposed plan. The Region will then include these recommendations in the Administrative Record for the site. While the Region is expected to give the Board’s recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency’s current delegations or alter in any way the public’s role in site decisions.

## **NRRB Advisory Recommendations**

The NRRB reviewed the site package for the Continental Steel site and discussed related issues with the State of Indiana representatives Art Garceau (State Project Manager) and Pat Carrasquero (Chief, Superfund Section) on April 22-23, 1997. Based on this review and discussion, the NRRB makes the following recommendations:

### General

- The State should clearly explain the extent to which site wastes either do or do not constitute principal threat source materials as defined in the National Contingency Plan and related guidance. Where any site wastes are identified as principal threat materials, decision documents should explain how the remedy addresses the NCP’s preference for treatment of these materials.

### Groundwater

- The State should fully develop and incorporate in the site decision documents a justification for the proposed technical impracticability TI waiver as well as the vertical and horizontal extent of the TI zone.
- The State should evaluate the appropriateness of locating ground water extraction in the immediate vicinity of the quarry in order to maximize control over potential plume migration westward toward the creek. For the area between the recovery system and the creek the State should investigate monitored natural attenuation as an alternative to the proposed recovery system to restore the shallow ground water.
- To the extent the state considers monitored natural attenuation as a means for ground water remediation (either as part of the proposed or alternative actions), -

it should evaluate this remediation approach using site specific characterization data and analyses that consider such factors as:

- historical ground water and/or soil chemistry data that demonstrate a clear and statistically meaningful trend of declining contaminant mass and/or concentrations at appropriate monitoring or sampling points;
- site characterization data that can be used to indirectly demonstrate the type of natural attenuation processes active at the site, and the rate at which such processes will reduce contaminant concentrations to required levels; for example, data needed for demonstrating occurrence of biological degradation processes include levels of dissolved oxygen, nitrite, iron (II), sulfate, methane, and carbon dioxide, among others;
- data from field or microcosm studies (conducted in or with actual contaminated site media) that directly demonstrate microbial activity in the soil or aquifer material and its ability to degrade the contaminants of concern.

#### Markland Avenue Quarry

- The State proposed to leave existing contaminated fill material in the Markland Avenue Quarry. In view of this fact:
  - The State should fully develop and explain in its decision documents for this site the rationale for removing the sediments and sludge from the quarry.
  - The Board is concerned that the quarry may remain a long-term source of contamination to the shallow ground water. The State should evaluate the appropriateness of ground water extraction in the immediate vicinity of the quarry in order to minimize potential for plume migration.
  - In view of the possibility that the quarry fill may remain a long-term contamination source, the State should consider using quarry fill materials that are more cost effective than “clean” fill to the extent allowable under State and federal law (e.g., building debris).
- It is unclear whether the added cost of the proposed impermeable cover designed to mitigate infiltration in the quarry area would be justified given that a significant amount of the quarry waste material would remain in the saturated zone. The State should consider a soil cover that is sufficient to prevent surface soil exposures (rather than one designed to mitigate infiltration). Such a cover may be constructed of relatively permeable and locally available soils.

- In the quarry area the State appears to be proposing remediation goals based on residential use of the quarry fill materials although future residential use of the quarry is not expected. The State should ensure that the remediation goals and cap design for this area are consistent with the expected future land use of the quarry and its surrounding properties.

#### Kokomo and Wildcat Creeks

- Regarding the proposed actions for the creeks, the Board recommends that cleanup levels at this site be no lower than background levels. This is because these creeks are located in heavily industrialized areas where any discrete cleanup to levels lower than “background” onsite would soon be overcome by the influence of sediments from numerous offsite upstream sources of these same contaminants.

#### Lagoon Area

- In evaluating the alternatives for action in the lagoon area against the NCP’s “balancing criteria,” the State should explain the value of the proposed excavation, making clear its relationship to flood storage capacity and stream bank maintenance.
- The Board believes that there may be alternate (lower cost) approaches to constructing the proposed “Corrective Action Management Unit” in the lagoon area. For example, adequate dewatering and stabilization of the sludge may be achieved by surcharging the area to achieve load-bearing capacity, while adequate cap performance may be achieved using the surcharge soils and the proposed impermeable material. The Board recommends that the State evaluate the feasibility of this or similar approaches.

#### Main Plant and Slag Processing Areas

- Based on the Board’s understanding that direct contact soil exposures present the only threats in the main plant and slag areas, the State should consider soil covers designed to prevent such exposures rather than the proposed impermeable caps designed to mitigate infiltration.

The NRRB appreciates the Region’s efforts to work closely with the State and community to identify the current proposed remedy. The Board members also express their appreciation to the State of Indiana for their participation in the review process. We encourage Region 5 management and staff to work with their Regional NRRB representative and the Region 5/7 Accelerated Response Center at Headquarters to discuss appropriate follow-up actions.

Please do not hesitate to give me a call if you have any questions at 703-603-8815.

cc: S. Luftig  
T. Fields  
B. Breen  
E. Cotsworth  
P. Nadeau

***-- Pre-decisional; Not for distribution --***